

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,963,146 B2  
DATED : November 8, 2005  
INVENTOR(S) : Zecca et al.

Page 1 of 6

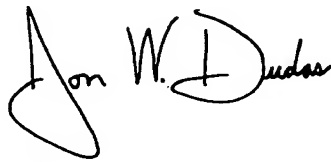
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Drawings.

Figs. 1-4, should be deleted and replaced with the drawings sheets, consisting of Figs 1-4, as shown on the attached pages.

Signed and Sealed this

Sixth Day of June, 2006

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
Zecca et al.

(10) Patent No.: **US 6,963,146 B2**  
(45) Date of Patent: **Nov. 8, 2005**

(54) **MODULAR POWER CONTROL APPARATUS**

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(h) by 495 days.

(21) Appl. No.: 10/072,755

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7, 2001.

(51) Int. Cl.<sup>7</sup> ..... B60L 1/00  
(52) U.S. Cl. .... 307/9.1; 307/10.1  
(58) Field of Search ..... 307/9.1, 10.1,  
307/38-41, 43

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,949,238 A 4/1976 Brookes  
3,952,209 A 4/1976 Shaklee et al. .... 307/9.1  
4,507,720 A 3/1985 Colbrese ..... 363/13  
4,652,769 A 3/1987 Smith et al. .... 307/31  
4,877,972 A 10/1989 Sobhani et al. .... 307/43  
5,179,376 A 1/1993 Pomatto ..... 340/870.02  
5,434,562 A 7/1995 Reardon ..... 713/200  
5,457,629 A 10/1995 Miller et al.  
5,514,859 A 5/1996 Seigel  
5,644,304 A 7/1997 Pavarotti et al. .... 340/953  
5,656,869 A 8/1997 Ghuskoter et al. .... 307/64  
5,675,480 A 10/1997 Stanford ..... 307/58  
5,684,450 A 11/1997 Brown ..... 340/310.02  
5,896,418 A 4/1999 Hamano et al.

5,999,798 A 12/1999 Yang ..... 455/66.1  
6,038,500 A 3/2000 Weiss  
6,062,903 A 5/2000 Hawes et al. .... 439/507  
6,107,696 A 8/2000 Peter et al.  
6,157,555 A 12/2000 Hemena et al. .... 363/71  
6,169,338 B1 1/2001 Stoll et al. .... 307/11  
6,175,789 B1 1/2001 Beckert et al. .... 701/33  
6,189,057 B1 2/2001 Schwanz et al.  
6,202,008 B1 3/2001 Beckert  
6,256,557 B1 7/2001 Avila et al.  
6,301,528 B1 10/2001 Bertram et al. .... 701/1  
6,427,167 B1 7/2002 Siedel ..... 709/222  
6,459,175 B1 10/2002 Potega ..... 307/149  
6,469,404 B1 10/2002 Pohjola ..... 307/10.1

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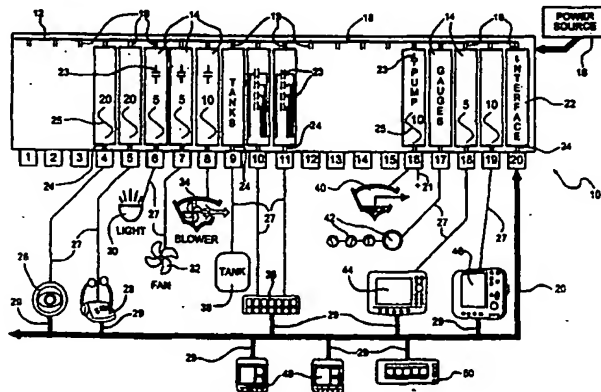
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(57) **ABSTRACT**

A modular power control apparatus for use with a plurality of peripheral devices. A plurality of modules, which connect to the peripheral devices, are supported by a housing. An interface module is supported by the housing to selectively interface with the plurality of modules for routing data to an appropriate module and peripheral device. A data communication cable is connected to the interface module for transferring data between the interface module and anyone of a variety of devices. A power source is also connected to the housing. The vehicle assembly is characterized by a modular connector supported by the housing and electrically connected to the power source. The modular connector includes a plurality of identical slots with the plurality of modules and the interface module being electrically connected to any one of the identical slots to transfer data between the modules and to provide electrical power to at least one of the modules, thereby facilitating communication with the peripheral devices and providing electrical power to at least one of the peripheral devices within the vehicle assembly.

56 Claims, 3 Drawing Sheets



U.S. Patent

Nov. 8, 2005

Sheet 1 of 4

6,963,146 B2

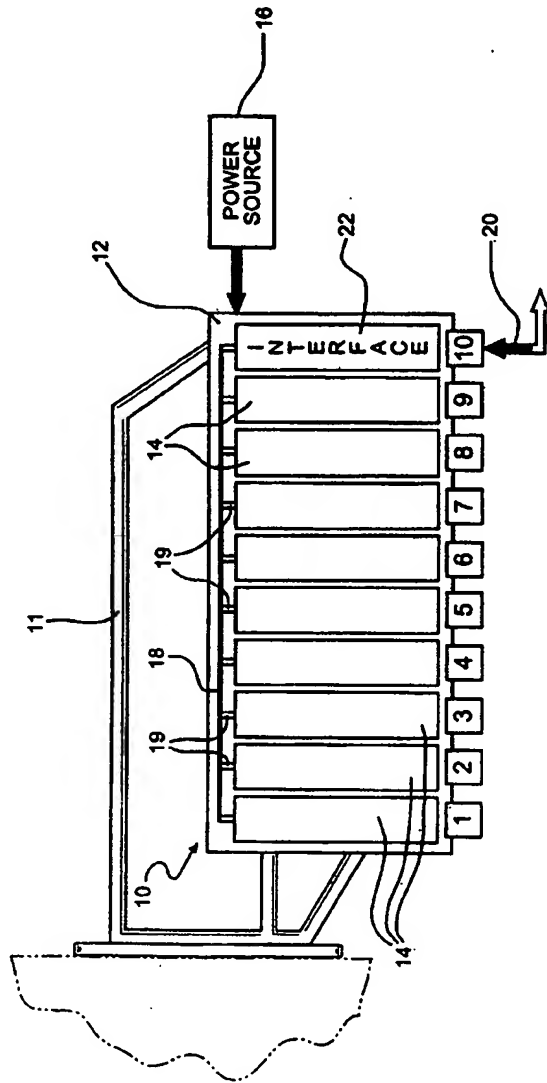
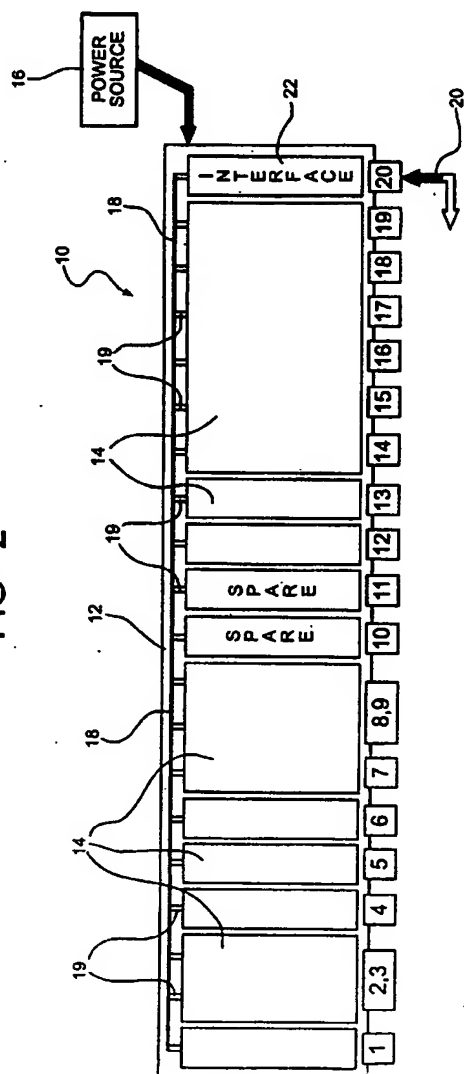


FIG - 1

**FIG - 2**

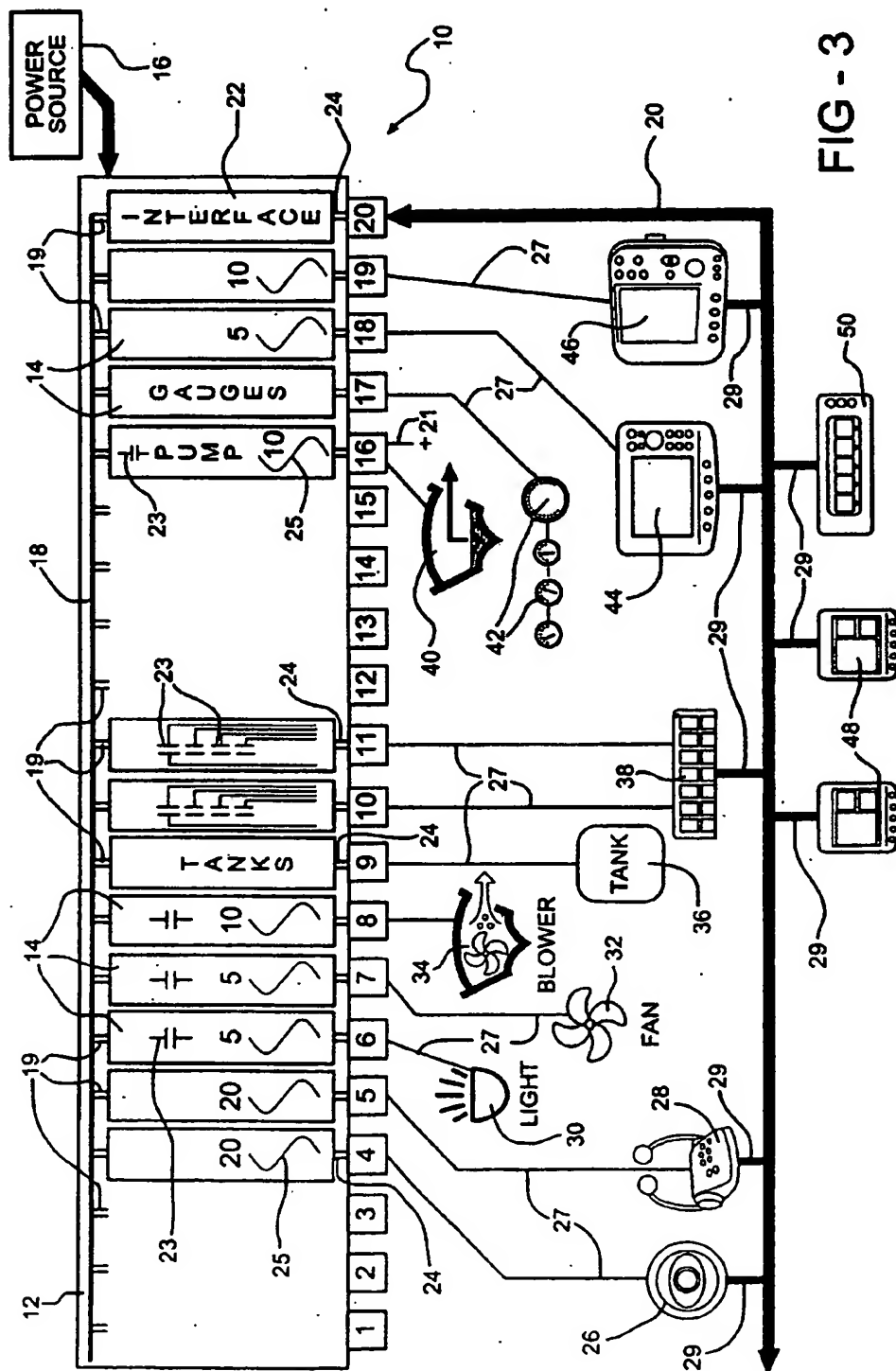


U.S. Patent

Nov. 8, 2005

Sheet 3 of 4

6,963,146 B2



U.S. Patent

Nov. 8, 2005

Sheet 4 of 4

6,963,146 B2

